

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS P.O. DOI 1450 Alexandra, Viginia 22313-1450

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,158 12/05/2001		Jane Brandman	A0000483-01-CA	4222
75	90 06/04/2003			
Charles W. Ashbrook			. EXAMINER	
Warner-Lamber 2800 Plymouth	Road		HUI, SAN MIN	
Ann Arbor, MI 48105			ART UNIT	PAPER NUMBER
			1617	R
			DATE MAILED: 06/04/2003	1

Please find below and/or attached an Office communication concerning this application or proceeding.

• >		Application No.	Applicant(s)	
•	•	10/007,158	BRANDMAN ET AL.	
	Office Action Summary	Examiner	Art Unit	
		San-ming Hui	1617	
	The MAILING DATE of this communication ap		he correspondence address	
THE I - Externanter - If the - If NO - Failu - Any r	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. sions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a rep period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statute pely received by the Office later than three months after the mailing patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply ly within the statutory minimum of thirty (30 will apply and will expire SIX (6) MONTHS a, cause the application to become ABAND	be timely filed b) days will be considered timely. from the mailing date of this communication. DONED (35 U.S.C. § 133).	
Status				
1)[Responsive to communication(s) filed on 21	February 2003 .		
2a)⊠	This action is FINAL . 2b) The	nis action is non-final.		
3)□ Dispositi	Since this application is in condition for allow closed in accordance with the practice under on of Claims			
4)🖂	Claim(s) 9 and 10 is/are pending in the applic	eation.		
	4a) Of the above claim(s) is/are withdra	wn from consideration.		
5)□	Claim(s) is/are allowed.			
6)⊠	Claim(s) 9 and 10 is/are rejected.			
7)	Claim(s) is/are objected to.			
8)□	Claim(s) are subject to restriction and/o	or election requirement.	•	
Applicati	on Papers			
9)[The specification is objected to by the Examine	er.		
10) 🔲 -	Γhe drawing(s) filed on is/are: a)□ acce	pted or b) objected to by the ∣	Examiner.	
	Applicant may not request that any objection to the	e drawing(s) be held in abeyance	e. See 37 CFR 1.85(a).	
11) 🔲	The proposed drawing correction filed on	_ is: a)⊡ approved b)⊡ disa	pproved by the Examiner.	
	If approved, corrected drawings are required in re	· •		
12) 🔲 -	The oath or declaration is objected to by the Ex	kaminer.		
Priority u	nder 35 U.S.C. §§ 119 and 120			
13)	Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C. § 1	19(a)-(d) or (f).	
a)[☐ All b)☐ Some * c)☐ None of:			
	1. Certified copies of the priority document	s have been received.	•	
	2. Certified copies of the priority documents have been received in Application No			
	3. Copies of the certified copies of the prior application from the International Bute the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).	-	
14)⊠ A	cknowledgment is made of a claim for domest	ic priority under 35 U.S.C. § 1	19(e) (to a provisional application).	
) The translation of the foreign language pro acknowledgment is made of a claim for domest (s)			
1) Notice 2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) _	5) Notice of Infor	mary (PTO-413) Paper No(s) mal Patent Application (PTO-152)	
.S. Patent and Tr PTO-326 (Re		ction Summary	Part of Paper No. 9	

Art Unit: 1617

DETAILED ACTION

Applicant's amendments filed February 21, 2003 have been entered.

The cancellation of claims 1-8 and 11-12 in amendments filed February 21, 2003 is acknowledged.

The outstanding rejections of claims 6-12 under 35 USC 112, second paragraph are withdrawn in view of the amendments filed February 21, 2003.

The outstanding rejections of claims 6-8 under 35 USC 102(b) are withdrawn in view of the amendments filed February 21, 2003.

Claims 9 and 10 are pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 1617

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redmond 2 and Thorneycroft et al. in view of Schoonen and Boissonneault, references of record in the previous office action mailed October 1, 2002.

Redmond 2 teaches an oral contraceptive, triphasic combination of norgestimate and ethinyl estradiol (TriCyclen® with gradually increased norgestimate dosage of 0.18, 0.215, 0.25 µg and fixed ethinyl estradiol daosage of 35µg), is effective in treating acne vulgaris (See particularly the abstract). Redmond 2 also teaches the rationale of selecting TriCylcen in the treatment of acne because ethinyl estradiol is known to increase serum levels of sex hormone binding globulin and thereby lower the testosterone level (See page 30S, col. 2, fourth paragraph). Moreover, Redmond 2 teaches that the progestins, norgestimate, has low androgenicity and does not counteract the estrogen-mediated rise in sex hormone binding globulin which results in the decrease of testosterone levels (See page 30S, col. 2, fourth paragraph).

Thorneycroft et al. teaches two oral contraceptives, Alesse® (containing 100µg of levonorgestrel and 20µg of ethinyl estradiol) and Loestrin® Fe 1/20 (containing 1mg of norethindrone acetate and 20µg of ethinyl estradiol), are effective in reducing acne (See particularly the abstract, also page 257, col. 2 – page 259, col. 2; also Figure 2 and Tables 3 and 4). Thorneycroft et al. also teaches that both levonorgestrel and norethindrone acetate can reduce the androgen levels (See the abstract). Thorneycroft et al. also teaches that both Alesse® and Loestrin® Fe 1/20 are significantly reduce the totals testosteron and increase the SHBG level (See page 258, Figure 1).

Art Unit: 1617

The references do not expressly teach the specific herein claimed dosage regimen of Estrostep or an effective amount of 1mg norethindrone acetate and a gradually increasing dose of ethinyl estradiol: 20μg for 5days, 30μg for 7 days and 35μg for 9 days.

Schoonen teaches norethindrone (also known as Norethisterone) has a very weak androgenicity and estrogenicity (See particularly the abstract).

Boissonneault teaches the specific herein claimed regimen of norethindrone acetate and ethinyl estradiol is useful as oral contraceptive (See col. 3, Table 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the herein claimed regimen of administering norethindroe and ethinyl estradiol to treat acne vulgaris.

One of ordinary skill in the art would have been motivated to employ the herein claimed regimen of administering norethindrone acetate and ethinyl estradiol to treat acne vulgaris. Firstly, based on the cited prior art, it is known that different oral contraceptives containing different progestins and ethinyl estradiol, such as TriCylen®, Alesse®, and Loestrin® Fe 1/20, are useful in treating acne vulgaris. Therefore, using yet another known oral contraceptives, such as Estrostep (taught by Boissonneault), in the treatment of acne vulgaris would be reasonably expect to be effective. Secondly, norethindrone acetate is known to have weak androgenicity and known to reduce the testosterone levels. Therefore, based on Redmond 2, substituting a progestin that has low androgenicity and would reduce testosterone level, such as norethindrone acetate, for norgestimate in the oral contraceptives would be reasonably expected to be effective

Art Unit: 1617

in treating acne. Thirdly, the optimization of result effect parameters (e.g., dosing regimens) is obvious as being within the skill of the artisan, absent evidence to the contrary.

Response to Arguments

Applicant's arguments filed February 21, 2003 averring the presence of unexpected results have been fully considered but they are not persuasive. Examiner notes that it is applicant's burden to demonstrate unexpected results over the prior art. See MPEP 716.02, also 716.02 (a) - (g). Furthermore, the unexpected results should be demonstrated with evidence that the differences in results are in fact unexpected and unobvious and of both <u>statistical and practical</u> significance. *Ex parte Gelles*, 22 USPQ2d 1318, 1319 (Bd. Pat. App. & Inter. 1992). Moreover, evidence as to any unexpected benefits must be "clear and convincing" *In re Lohr*, 137 USPQ 548 (CCPA 1963), and be of a scope reasonably commensurate with the scope of the subject matter claimed, *In re Linder*, 173 USPQ 356 (CCPA 1972). In the instant case, example 2 in the instant specification page 28 - 41 is considered. The example is merely showing the efficacy of the herein claimed regimen in the treatment of acne, which is an expected result in view of the teachings of the cited prior art. Therefore, no unexpected benefits were seen to be present herein.

Applicant's arguments filed February 21, 2003 averring Redmond employing a fixed dose and the herein invention employing a lower dose of etrogen have been considered, but are not found persuasive. The cited prior art actually teaches low-dose

Art Unit: 1617

estrogen oral contraceptives are also effective in treating acne (See Thorneycroft et al.'s teachings about Alesse® and Loestin® Fe 1/20, which containing 20mcg of ethinyl estradiol). Therefore, possessing the teachings of the cited prior art, one of ordinary skill in the art would have been motivated to employ the herein claimed estrogen dosage for the treatment of acne, absent evidence to the contrary.

Applicant's arguments filed February 21, 2003 averring the cited prior art's failure to teach patients with severe acne can be treated with the herein recited regimen have been considered, but are not found persuasive. Examiner notes that claim 9 encompasses every patients suffered from acne, which does not distinguish the severity of acne in the patients herein. Therefore, possessing the teachings of the cited prior art, one of ordinary skill in the art would have been motivated to employ any oral contraceptives, such as Estrostep, in the treatment of acne would be reasonably expected to be effective, absent evidence to the contrary.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

than SIX MONTHS from the date of this final action.

Art Unit: 1617

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later

Any inquiry concerning this communication or earlier communications from the examiner should be directed to San-ming. Hui whose telephone number is (703) 305-1002. The examiner can normally be reached on Mon 9:00 to 1:00, Tu - Fri from 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, PhD., can be reached on (703) 305-1877. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4556 for regular communications and (703) 308-4556 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

San-ming Hui June 2, 2003

SREENI PADMANABHAN PRIMARY EXAMINER 6/2/03

Page 7